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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,788	02/18/2004	Takahiro Goto	Q79792	9845

23373 7590 09/24/2007  
SUGHRUE MION, PLLC  
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WASHINGTON, DC 20037

EXAMINER
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WALKE, AMANDA C

ART UNIT	PAPER NUMBER
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1752

MAIL DATE	DELIVERY MODE
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09/24/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/779,788	<b>Applicant(s)</b> GOTO, TAKAHIRO	
	<b>Examiner</b> Amanda C. Walke	<b>Art Unit</b> 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/9/2007 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 5-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al (EP 1176467) in view of Tutt et al (5,985,526), Gilman et al (4,153,799) and Muller et al (EP129343).

Oshima et al disclose a negative working infrared sensitive printing plate comprising a substrate, IR sensitive layer having a binder polymer meeting the instant claim limitations of claim 17 having a molecular weight of from 2,000 to 1,000,000 ([0011], pages 5-9, and [0036]), an interlayer between the substrate and IR sensitive layer ([0117]), and a protective layer ([0118]). The heat/ IR sensitive layer further comprises a solvent, an IR absorber such as a cyanine dye in particle form having a diameter of 0.01 to 10 microns ([0066]-[0075]), polymerization initiator/ radical generator in an amount meeting the instant claim limitations

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([0059]-[0065]; [0081]-[0088]). While the reference teaches that any known sensitizer or initiator may be employed, and lists some examples, the reference fails to teach the addition of a carboxylic acid-containing sensitizer compound.

Muller et al disclose a carboxylic acid compound for use as a sensitizer/ initiator in IR sensitive printing plate materials in combination with conventional acid generator compounds and IR absorbing dyes (abstract, [0003], [0013], [0020], [0023], [0028],[0066]). Such compounds include benzoic acid compounds [0036] which have a molecular weight of less than 3,000.

Given the teachings of the references, it would have been obvious to one of ordinary skill in the art to prepare the material of Oshima et al choosing to employ the initiator of Muller et al to improve the sensitivity and polymerization of the IR sensitive material of Oshima with reasonable expectation of achieving a material having high printing durability.

Oshima further teaches that a protective layer is preferably present, coated onto the IR sensitive layer. Suitable materials include polymers such as PVA, and the layer may comprise any useful additives. The reference fails to specifically teach the addition of a UV absorber.

Tutt et al teaches an IR sensitive printing plate comprising similar dyes and polymerizable compounds as Oshima. Deposited onto the IR sensitive layer is an overcoat layer preferably comprising a UV absorbing compound to prevent dye degradation (column 3, lines 57-61). With respect to claim 18, the most widely employed type of UV absorbing compounds are benzophenones (see wikipedia), thus one of ordinary skill in the art would have immediately envisaged employing a benzophenone as the UV absorbing compound.

Tutt et al teaches that benzophenones are suitable for use in its overcoat layer, but fails to teach a specific compound.

Gilman et al teaches a benzophenone compound appearing to fall within the scope of the newly amended claim 1.

Given that the compound of Gilman et al is a known benzophenone compound, it would have been obvious to one of ordinary skill in the art to prepare the material of Tutt et al choosing to employ the known compound of Gilman et al.

Given the teachings of the references, it would have been obvious to one of ordinary skill in the art to prepare the material of Oshima et al choosing to employ a UV absorber in its protective layer to prevent dye degradation as taught by Tutt et al and Gilman et al with reasonable expectation of achieving a material having high printing durability.

#### ***Response to Arguments***

4. Applicant's arguments filed 7/9/2007 have been fully considered but they are not persuasive. Applicant has argued that the layer of Tutt may not be employed as the overcoat material of Oshima. Tutt has been relied upon solely for its teaching of an overcoat layer for a thermally sensitive polymeric layer, not for the entire material. Therefore, given that the overcoat is known to be employed in similar applications, it would have been obvious to one of ordinary skill in the art to employ the known overcoat of Tutt in its material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C. Walke whose telephone number is 571-272-1337. The examiner can normally be reached on M-R 5:30-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Amanda C Walke*  
Amanda C Walke  
Primary Examiner  
Art Unit 1752

ACW  
September 16, 2007